AMENDMENTS TO THE CLAIMS

Claims 1-28 **(Canceled)**

29. **(Currently amended)** A prokaryotic cell that is genetically modified to shift the redox status of the cytoplasm to a more oxidative state that favors disulfide bond formation, relative to ~~wild-type~~ a prokaryotic cell that is not genetically modified, which cell further comprises a mutated *AhpC* gene comprising an insertion of three nucleotides in the TCT triplet rich region located at about codons 36-39 of an *AhpC* gene, which insertion ~~is further genetically modified to~~ increases the cell's ability to proliferate relative to a cell that is not further genetically modified.

30. **(Previously presented)** The prokaryotic cell of claim 29, in which the expression or activity of a reductase is decreased relative to that in the corresponding wild-type cell.

31. **(Previously presented)** The prokaryotic cell of claim 30, wherein the reductase is selected from the group consisting of thioredoxin reductase and glutathione reductase.

32. **(Previously presented)** The prokaryotic cell of claim 30, in which the expression or activity of a second reductase is decreased relative to that in the corresponding wild-type cell.

33. **(Previously presented)** The prokaryotic cell of claim 29, wherein the second reductase is selected from the group consisting of thioredoxin reductase and glutathione reductase.

34. **(Original)** The prokaryotic cell of claim 30, wherein the gene encoding the reductase is mutated.

35. **(Original)** The prokaryotic cell of claim 34, wherein the gene encoding the reductase contains a null mutation.

36. **(Original)** The prokaryotic cell of claim 32, wherein the genes encoding the first and the second reductases contain a null mutation.

37. **(Original)** The prokaryotic cell of claim 30, wherein the activity of the reductase is inhibited.

38. **(Original)** The prokaryotic cell of claim 37, wherein the activity of the reductase is inhibited by contacting the prokaryotic cell with an agent.

39. **(Currently amended)** The prokaryotic cell of claim 29, wherein the ~~further genetic modification is a suppressor mutation~~ three nucleotides are TCT.

40. **(Currently amended)** The prokaryotic cell of claim 29, wherein the ~~further modification restores at least some of the reducing capacity to the cytoplasm of the prokaryotic cell relative to cell that is not further genetically modified~~ TCT triplet rich region of the mutated *AhpC* gene encodes a stretch of four phenylalanines.

41. **(Currently amended)** The prokaryotic cell of claim 40, wherein the ~~further modification is a mutation in the *ahpC* gene which reduces its peroxidase activity~~ mutated *AhpC* gene encodes a protein comprising SEQ ID NO: 11.

42. **(Currently amended)** The prokaryotic cell of claim [[41]] 40, wherein the ~~mutation is located in a region containing four triplet repeats~~ TCT triplet rich region has the nucleotide sequence set forth in SEQ ID NO: 10.

43. **(Currently amended)** The prokaryotic cell of claim [[42]] 41, wherein the ~~mutation results in~~ mutated *AhpC* gene encodes a mutated AhpC protein that has the amino acid sequence set forth in SEQ ID NO: 24.

44. **(Original)** The prokaryotic cell of claim 29, further containing a gene encoding a catalyst of disulfide bond formation and/or isomerization.

45. **(Previously presented)** The prokaryotic cell of claim 44, wherein the catalyst is a DsbC protein which lacks a signal peptide.

46. **(Currently amended)** The prokaryotic cell of claim 44, wherein the catalyst is a variant of a protein of the thioredoxin superfamily having one or more mutation in the active site motif CXXC (SEQ ID NO: 1) which provides the protein with a redox potential that is higher than that of its wild-type counterpart.

47. **(Original)** The prokaryotic cell of claim 46, wherein the variant is a "Grx" variant of thioredoxin A.

48. **(Original)** The prokaryotic cell of claim 44, wherein expression of the gene encoding the catalyst is inducible.

Claim 49 **(Canceled)**

50. **(Currently amended)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 29 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein ~~from the host cell~~.

Claims 51-54 **(Canceled)**

55. **(Previously presented)** The prokaryotic cell of claim 29, having ATCC Accession No. PTA-938.

56. **(Previously presented)** The prokaryotic cell of claim 29, having ATCC Accession No. PTA-939.

57. **(New)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 39 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein.

58. **(New)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 40 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein.

59. **(New)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 41 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein.

60. **(New)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 42 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein.

61. **(New)** A method for producing a protein having at least one disulfide bond comprising: growing a prokaryotic cell of claim 43 comprising a nucleic acid encoding a protein having at least one disulfide bond, under conditions in which the protein is produced, and isolating the protein.

62. **(New)** The method of claim 46, wherein the protein of the thioredoxin superfamily is TrxA.

63. **(New)** The method of claim 62, wherein the active site motif comprises SEQ ID NO: 3, 4, 5 or 6.